

Impairment Summary

Assessment Unit	Stream Name	Length (miles)	Boundaries	Cause
VAW-L04R_PEE01A02	Peters Creek	2.52	Peters Creek mainstem from its confluence with the Roanoke River upstream to the Melrose Avenue Bridge (Rt. 11/460).	Escherichia coli
VAW-L04R_PEE02A02	Peters Creek	4.62	Peters Creek mainstem from the Melrose Avenue Bridge (Rt. 11/460) upstream to its headwaters.	Escherichia coli

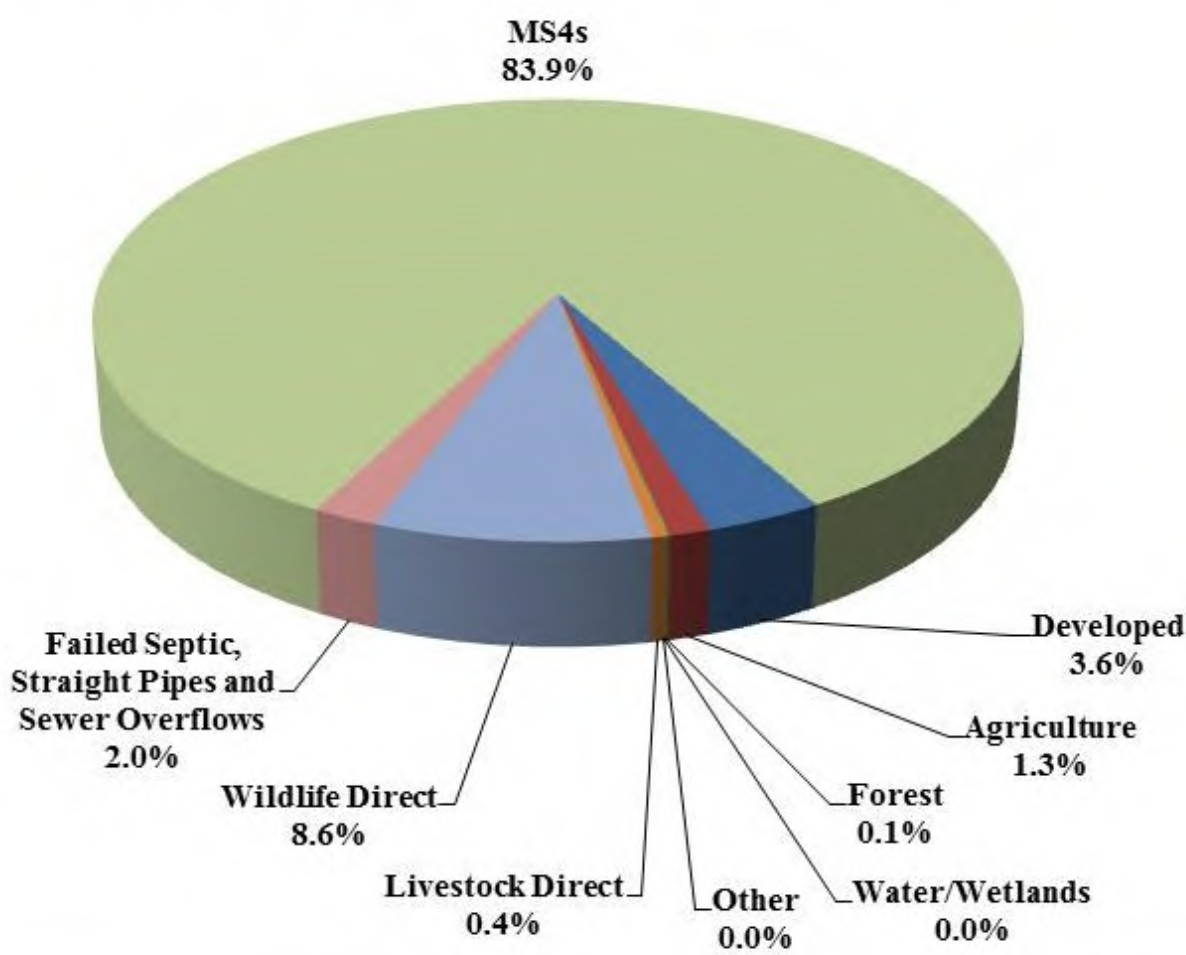
Land Use Distribution (NLCD 2006)

Land Use Category	Area	
	Acres	Percent
Developed	3,808.1	66.0%
Agriculture	180.0	3.1%
Forest	1,771.6	30.7%
Water/Wetlands	0.0	0.0%
Other	13.2	0.2%
<b>Total</b>	<b>5,772.8</b>	<b>100.0%</b>

Existing and Allocated Bacteria Loads

Land Use/Source	Total Annual <i>E. coli</i> Loads (billion coliform forming units/year)		Percent Reduction (%)
	Existing Load	Allocation Load	
<b>Land Based Non-point</b>			
Developed	762.2	8.4	98.9%
Agriculture	393.1	4.3	98.9%
Forest	33.4	0.4	98.9%
Water/Wetlands	0.0	0.0	0.0%
Other	<0.1	<0.1	98.9%
<b>Direct Non-point</b>			
Livestock Direct	127.7	0.0	100.0%
Wildlife Direct	2,602.2	1,204.8	53.7%
Failed Septic, Straight Pipes and Sewer Overflows	612.3	0.0	100.0%
<b>Point Source</b>	0.0	0.0	0.0%
<b>MS4s</b>	25,808.4	283.9	98.9%
<b>Total</b>	<b>30,339.1</b>	<b>1,501.8</b>	<b>95.1%</b>

Existing Bacteria Load Distribution



Existing Best Management Practices  
Agricultural and Stormwater

Agricultural Best Management Practice	Count	Area Treated	Streamlength Protected (ft)
No Known Agricultural Best Management Practices			

Agricultural Best Management Practice	Count	Reported Area Treated* (acres)
Bioretention	3	No Data
Detention Basin	78	1,390.3
Extended Detention Basin	1	No Data
Manufactured Unit	2	No Data
Porous Pavement	1	No Data
Sediment Basin	1	No Data
Underground Detention Basin	3	11.9
Wet Pond	4	876.8

\*Not all Best Management Practices reported area treated

The municipalities are in the process of creating Best Management Practices inventories, so not all Best Management Practices present in the watershed may be reported.

Potential Implementation Actions to Reduce Bacteria

- Existing Best Management Practice Retrofits
- Low Impact Development Stormwater Controls
- Septic System Repair/Replacement
- Riparian Buffer Creation/Expansion